1898MNRAS..58..103.

Occultations of the Pleiades by the Moon on 1897 July 23 and 1898 January 3, observed at the Radcliffe Observatory, Oxford.

(*Communicated by the Radcliffe Observer.*)

The following are observations of two occultations of the Pleiades by the Moon, viz. on 1897 July 23 and 1898 January 3 :—

	Name of Star.	Magnitude.	Phenomenon.	Moon's Limb.	Observer.	Instrument.	Power.	Time Noted.	Oxford Sidereal Time.	Greenwich Mean Time.	Ref. No.
1897.								h m s	h m s	h m s	
July 23	17 Tauri	3·8	Disapp.	Bright	R.	Barclay Equat.	85	20 18 45·5	20 21 3·12	12 18 8·5	(1)
	16 Tauri	6·5	Reapp.	Dark	R.	,,	85	20 51 36·0	20 53 53·74	12 50 53·8	(2)
	17 Tauri	3·8	,,	,,	R.	,,	45	21 11 24·9	21 13 42·71	13 10 39·5	...
	Arg. Z + 23°·536	6·8*	Disapp.	Bright	R.	,,	45	21 19 48·	21 22 5 84	13 19 1·2	(3)
	η Tauri	3 0	,,	,,	R.	,,	45	21 23 57·7	21 26 15·54	13 23 10·3	(4)
	Arg. Z + 23°·540	7·0*	,,	,,	R.	,,	45	21 28 25·	21 30 42·86	13 27 36·8	(5)
	Arg. Z + 23°·517	8·0*	Reapp.	Dark	R.	,,	45	21 33 52·	21 36 30·72	13 33 23·8	(6)
	23 Tauri	4·2	,,	,,	R.	,,	45	21 34 26·7	21 37 5·42	13 33 58·4	(7)
	Arg. Z + 23°·536	6·8*	,,	,,	R.	,,	45	22 13 37·3	22 16 16·15	14 13 2·7	...
	η Tauri	3·0	,,	,,	R.	,,	45	22 14 28·0	22 17 6·85	14 13 53·2	(8)
	28 Tauri	6·2	Disapp.	Bright	R.	,,	45	22 17 6·	22 19 44·86	14 16 30·8	(9)
	28 Tauri	6·2	Reapp.	Dark	R.	,,	45	22 54 59·5	22 57 38·50	14 54 18·2	(10)
1898.											
Jan. 3	17 Tauri	3·8	Disapp.	Dark	W.	Heliometer	80	2 1 29·2	2 1 15·32	7 12 35·8	(11)

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

Downloaded from http://mnras.oxfordjournals.org/ at Tulane University on May 13, 2015

1898.	Name of Star.	Magnitude.	Phenomenon.	Moon's Limb.	Observer.	Instrument.	Power.	Time Noted.	Oxford Sidereal Time.	Greenwich Mean Time.	Ref. No.
								h m s	h m s	h m s	
Jan. 3	17 Tauri	3·8	Disapp.	Dark	R.	Barclay Eq.	85	2 1 29·0	2 1 15·24	7 12 35·7	(12)
	Arg. Z + 23°·510	8·1*	,,	,,	W.	Heliometer	80	2 12 58·3	2 12 44·41	7 24 3·0	(13)
	,,	,,	,,	,,	R.	Barclay Eq.	85	2 12 58·0	2 12 44·27	7 24 2·8	(14)
	Arg. Z + 23° 517	8 0*	,,	,,	W.	Heliometer	80	2 28 30·2	2 28 16·31	7 39 32·3	(15)
	,,	,,	,,	,,	R.	Barclay Eq.	85	2 28 29·8	2 28 16·13	7 39 32·2	(16)
	23 Tauri	4·2	,,	,,	W.	Heliometer	80	2 47 52·8	2 47 38·89	7 58 51·7	(17)
	,,	,,	,,	,,	R.	Barclay Eq.	85	2 47 52·5	2 47 38 88	7 58 51·7	(18)
	Arg. Z + 23°·519	8·2*	,,	,,	W.	Heliometer	80	2 53 1·2	2 52 47·28	8 3 59·3	...
	,,	,,	,,	,,	R.	Barclay Eq.	85	2 53 0·0	2 52 46·39	8 3 58·4	(19)
	Arg. Z + 23°·520	8·4*	,,	,,	W.	Heliometer	80	2 53 30·5	2 53 16·58	8 4 28·5	...
	,,	,,	,,	,,	R.	Barclay Eq.	85	2 53 30·5	2 53 16·89	8 4 28·8	(20)
	Arg. Z + 23°·523	7·4*	,,	,,	R.	,,	85	3 8 26 4	3 8 12·83	8 19 22·3	(21)
	17 Tauri	3·8	Reapp.	Bright	W.	Heliometer	80	3 14 25·	3 14 11·07	8 25 19·6	(22)
	Arg. Z + 23°·536	6·8*	Disapp.	Dark	R.	Barclay Eq.	85	3 27 5·0	3 26 51·49	8 37 57·9	(23)
	η Tauri	3·0	,,	,,	W.	Heliometer	80	3 32 8·2	3 31 54·25	8 42 59·8	(24)
	,,	,,	,,	,,	R.	Barclay Eq.	85	3 32 6·75	3 31 53 26	8 42 58·9	(25)
	23 Tauri	4·2	Reapp.	Bright	W.	Heliometer	80	3 59 7·	3 58 53·02	9 9 54·2	...
	28 Tauri	6·2	Disapp.	Dark	W.	,,	80	4 40 48·0	4 40 34·00	9 51 28 4	...

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

Downloaded from http://mnras.oxfordjournals.org/ at Tulane University on May 13, 2015

1898MNRAS..58..103.

1898MNRAS..58..103.

	Name of Star.	Magnitude.	Phenomenon.	Moon's Limb.	Observer.	Instrument.	Power.	Time Noted.	Oxford Sidereal Time.	Greenwich Mean Time.	Ref. No.
								h m s	h m s	h m s	
1898. Jan. 3	28 Tauri	6·2	Disapp.	Dark	R.	Barclay Eq.	85	4 40 47·3	4 40 34·01	9 51 28·4	(26)
	27 Tauri	3·8	,,	,,	W.	Heliometer	80	4 46 8·15	4 45 54·14	9 56 47·6	(27)
	,,	,,	,,	,,	R.	Barclay Eq.	45	4 46 7·15	4 45 53·87	9 56 47·4	...
	η Tauri	3·0	Reapp.	Bright	W.	Heliometer	80	4 55 43·5	4 55 29·48	10 6 21·4	(28)
	,,	,,	,,	,,	R.	Barclay Eq.	45	4 55 39·	4 55 25·75	10 6 17·7	(29)

The magnitudes given above are taken from the *N.A.*, or when marked with an asterisk from the Berlin (B) A.G. Catalogue.

Observers' Remarks.

(1) Gradual disappearance. (2) Instantaneous. (3) Merest speck at disappearance. (4) Good. (5) Faint. (6) Angle from vertex about 280°. (7), (8) Instantaneous. (9) Gradual disappearance. (10), (11) Instantaneous. (12) Good; instantaneous. (13), (15) In the same parallel and of nearly equal magnitude. (14), (16) Good; instantaneous. (17) Good. (18) Instantaneous; fairly good. (19) Fairly good; colour reddish. (20) Fairly good; magnitude estimated 0·2 fainter than (19). (21) Good. (22) May be a second late, not more. (23) Good; instantaneous. (24) Instrument had just been moved in R.A. to correct the diurnal movement when disappearance occurred. (25), (26) Good; instantaneous. (27), (28) Good. (29) Good; image of star very small; thin film of frost on object glass.

A ground fog prevailed during the occultations of 1898 January 3, and was at times rather dense.

The Barclay Equatorial is situated $0^s{\cdot}4$ west of the heliometer.

Observers:—W., Mr. W. Wickham; R., Mr. W. H. Robinson.

Radcliffe Observatory, Oxford:
1898 *January* 10.

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

Downloaded from http://mnras.oxfordjournals.org/ at Tulane University on May 13, 2015

1898MNRAS..58..103.

Ephemeris for Physical observations of

(Continued from

Greenwich Noon. 1898.	P	L−O	B	Apparent Diameter. Equat. 2a.	Defect.	Polar 2b.	d	w	B′
	°	°	°	″	″	″	°	°	°
Mar. 2	25·041	52·726	−2·697	44·07	0·07	41·30	4·62	264·8	−2·88
4	25·057	52·514	2·695	44·20	·06	41·43	4·26	264·4	2·87
6	25·073	52·294	2·693	44·32	·05	41·55	3·89	263·9	2·87
8	25·089	52·067	2·690	44·43	·04	41·65	3·51	263·3	2·87
10	25·105	51·834	2·687	44·54	·03	41·75	3·13	262·5	2·87
12	25·122	51·595	2·683	44·64	·02	41·84	2·74	261·6	2·86
14	25·139	51·350	2·678	44·72	·02	41·92	2·35	260·7	2·86
16	25·156	51·102	2·673	44·78	·01	41·98	1·96	259·1	2·85
18	25·172	50·851	2·667	44·84	·01	42·03	1·56	256·5	2·85
20	25·188	50·596	2·661	44·88	·00	42·07	1·17	252·7	2·84
22	25·203	50·339	2·654	44·92	·00	42·11	0·79	245	2·83
24	25·218	50·081	2·647	44·95	·00	42·13	0·43	224	2·82
26	25·233	49·823	2·639	44·95	·00	42·13	0·30	163	2·82
28	25·247	49·564	2·631	44·95	·00	42·13	0·58	120	2·81
30	25·261	49·307	2·622	44·92	·00	42·11	0·97	106 6	2·80
Apr. 1	25·274	49·052	−2·613	44·89	0·01	42·08	1·35	101·2	−2·79
3	25·287	48·798	2·604	44·85	·01	42·04	1·74	98·2	2·78
5	25·299	48·548	2·594	44·80	·02	42·00	2·14	96·1	2·77
7	25·311	48·301	2·583	44·74	·02	41·94	2·53	94·7	2·76
9	25·322	48·059	2·572	44·66	·03	41·86	2·92	93·80	2·75
11	25·332	47·822	2·561	44·58	·04	41·78	3·31	92·99	2·73
13	25·341	47·590	2·550	44·47	·05	41·69	3·69	92·35	2·72
15	25·350	47·364	2·539	44·36	·06	41·58	4·06	91·86	2·71
17	25·359	47·146	2·528	44·25	·07	41·48	4·44	91·50	2·70
19	25·367	46·937	2·517	44·12	·08	41·35	4·79	91·20	2·68
21	25·374	46·733	2·505	43·97	·09	41·22	5·15	90·95	2·67
23	25·381	46·537	2·493	43·82	·10	41·07	5·50	90·71	2·66
25	25·387	46·351	2·481	43·67	·11	40·94	5·83	90·50	2·65
27	25·392	46·174	2·469	43·50	·13	40·78	6·16	90·31	2·63
29	25·397	46·007	2·457	43·33	·14	40·61	6·48	90·14	2·62
May 1	25·402	45·851	−2·445	43·15	0·15	40·45	6·79	89·99	−2·61
3	25·406	45·705	2·434	42·96	·16	40·27	7·08	89·85	2·60
5	25·410	45·570	2·423	42·77	·17	40·09	7·37	89·72	2·58
7	25·413	45·446	2·412	42·57	·19	39·90	7·64	89·59	2·57
9	25·416	45·333	−2·401	42·36	0·20	39·71	7·91	89·47	−2·56

Downloaded from http://mnras.oxfordjournals.org/ at Tulane University on May 13, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System